

ABSTRACT

An internal, mechanical wet clutch for agricultural equipment is disclosed in which the clutch mechanism is enclosed within a lubricant case filled with oil. The enclosed clutch mechanism is attached to a gearbox for disposition in the driveline of agricultural machinery. The clutch enclosure inhibits tampering with the torque settings of the mechanism and includes an oil bath that functions to lubricate the components of the clutch while at the same time providing a fluid braking that inhibits freewheeling. The enclosures for the gearbox mechanism and clutch mechanism may be completely separate enclosures fastened together, a single enclosure with separate sealed compartments for the gearbox mechanism and the clutch mechanism or a single enclosure with a single compartment enclosing both mechanisms. In one embodiment, the gearbox is a right angle gearbox and is integrally formed with the clutch mechanism.